

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/827,048	04/05/2001	Stephen Cutler	CUTLP0101USA	4511		
7:	590 02/12/2003					
Renner, Otto,			EXAMINER			
1621 Euclid Av	Boisselle & Sklar, LLP 1621 Euclid Avenue			GILMAN, ALEXANDER		
19th Floor Cleveland, OH 44115-2191			ART UNIT	PAPER NUMBER		
			2833			

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Ammilia a sala	1		
Office Action Summary			Applicant(s)	V		
		09/827,048	CUTLER ET AL.			
		Examiner	Art Unit			
	The MAILING DATE of this communication app	Alexander Gilman	2833			
Period fo	or Reply	rears on the cover sheet with th	ie correspondence add	dress		
- External control con	MORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Persions of time may be available under the provisions of 37 CFR 1.13 or SIX (6) MONTHS from the mailing date of this communication. Per period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply b within the statutory minimum of thirty (30) fill apply and will expire SIX (6) MONTHS for	e timely filed days will be considered timely rom the mailing date of this co	: mmunication.		
Status	-					
1)🛛	Responsive to communication(s) filed on <u>09 N</u>	<u> 1ay 2002 and 18 November 20</u>	<u>002</u> .			
2a)⊠		s action is non-final.				
3) Dispositi	Since this application is in condition for allowa closed in accordance with the practice under <i>t</i> ion of Claims	nce except for formal matters, Ex parte Quayle, 1935 C.D. 11	prosecution as to the , 453 O.G. 213.	merits is		
4)🖂	Claim(s) 33-40,42,44 and 47-50 is/are pending	in the application.				
	4a) Of the above claim(s) is/are withdraw	n from consideration.				
	Claim(s) is/are allowed.					
6)⊠	Claim(s) 33-39,42,44 and 48-50 is/are rejected.					
	Claim(s) 40, 47 is/are objected to.					
8) 🗌 Application	Claim(s) are subject to restriction and/or on Papers	election requirement.				
	The specification is objected to by the Examiner.					
1	The drawing(s) filed on is/are: a)☐ accept					
,						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
-	If approved, corrected drawings are required in reply		Toved by the Examiner			
12) 🗌 T	he oath or declaration is objected to by the Exa					
	nder 35 U.S.C. §§ 119 and 120					
	Acknowledgment is made of a claim for foreign p	nriority under 35 U.S.C. & 140	(a) (d) ar (5)			
	All b)☐ Some * c)☐ None of:	monty under 35 0.5.C. § 1190	(a)-(u) or (r).			
	1. Certified copies of the priority documents	have been received				
2	2. Certified copies of the priority documents		tion No			
3			· · · · · · · · · · · · · · · · · · ·			
 Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
	knowledgment is made of a claim for domestic			pplication).		
a)	☐ The translation of the foreign language provisor Cknowledgment is made of a claim for domestic	sional application has been re	ceived	, , , ,		
Attachment(s	5)	-				
2) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informat	ry (PTO-413) Paper No(s). Patent Application (PTO-1	52)		
S. Patent and Trad TO-326 (Rev.		n Summary	Part of Par			

Art Unit: 2833

DETAILED ACTION

The finality of the rejection of the last Office action is withdrawn for simplifying the issues for appeal.

Claim Rejections - 35 USC § 103

1. Claims 33-37, 39, 44, and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozuka et al in view of Gelati.

With regard to claims 39, 44, and 50, Tozuka (US Pat. No. 5,454,730) discloses (Fig. 1) a locking connector comprising:

an electrical contact component (21) including a contact section (27), another section (28), and an intermediate section (26) with an opening (26) that receives a second conductor (2); at least one electrically-conductive spring locking clip (22).

Tozuka do not disclose

a first conductor and a release hole formed through said contact section transversely offset from said opening;

an inturned lip integral with the contact section that acts as a stop for the second conductor.

Gelati disclose a first conductor and a release hole (12) formed through said contact section transversely offset from said opening.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Tozuka device with a release hole formed through said contact section, as taught by Gelati, to conveniently handle inserting and removing the second conductor using a tool.

Tozuka when modified by Gelati does not uses the inturned lip integral with the contact section that acts as a stop for the second conductor, utilizing for it the holder (11).

In Tozuka - Gelati, it would have been obvious and cost-effective to manufacture the end portion of the end of the Tozuka's holder (11) flush with the portion (33) of the contact component (21) to reduce the overall dimensions of the connector.

Art Unit: 2833

As a result the second conductor would be stopped by the holder and elimination of the inturned lip, is considered an obvious expedient since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184.

With regard to claims 33, 34 and 37, Tozuka discloses the guide means (29) and the enclosure (11, 12).

With regard to claims 35, 36, 48, and 49, Tozuka when modified by Gelati discloses (Gelati) the first conductor and the additional locking spring.

To attach the first conductor to the contact component or make it integral with the contact component (claims 48 and 49), would have been an obvious matter of design absent any criticality and since the function performed by the first conductor is the same.

2. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozuka et al in view of Kubota et al.

Tozuka et al all of the limitations as applied to claim 39 above except for the grip locking end portion is transversely curved across the full width of said grip locking end portion.

Kubota et al (US Pat. No. 4,673,232) disclose (Fig. 1 or 7) the grip locking end portion (1a) is transversely curved.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the Gelati's grip locking end portion transversely curved, as taught by Kubota et al , to make the end portion correspondent to the configuration of the second conductor.

3. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozuka et al in view of Gelati as applied to claim 39 above, and further in view of Kubota et al.

Tozuka et al when modified by Gelati discloses all of the limitations except for the grip locking end portion is transversely curved across the full width of said grip locking end portion.

Application/Control Number: 09/827,048

Art Unit: 2833

Kubota et al (US Pat. No. 4,673,232) disclose (Fig. 1 or 7) the grip locking end portion (1a) is transversely curved.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the Gelati's grip locking end portion transversely curved, as taught by Kubota et al , to make the end portion correspondent to the configuration of the second conductor.

Since the curvature of grip locking end portion is predetermined by geometry of the conductor, it would have been an obvious matter of design absent any criticality to make the grip locking end portion is transversely curved across its full width.

Additionally, the specification considers (p. 11, lines 6-9) the grip locking end portion as an optional one and does not teach why that element should be transversely curved across its full width.

Allowable Subject Matter

Claims 40 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No prior art has been found to anticipate or render obvious the claimed subject matter.

Specifically, none of the prior art of record discloses the combination of the limitations presented including the another inturned lip integral with the contact section, said lip is utilized for fixing the clip of the specified configuration to the contact section.

Response to Arguments

Applicant's arguments filed 05/09/02 have been fully considered but they are not persuasive.

With regard to claims 39 and 44, Applicants argue that the prior art (Tozuka when modified by Gelati) does not uses the inturned lip integral with the contact section that acts as a stop for the second conductor. Tozuka – Gelati utilize the holder (11) as a stop.

Art Unit: 2833

As the 103 Rejection states, in the modified Tozuka - Gelati, the elimination of the inturned lip, is an obvious expedient since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184.).

With regard to claims 38 and 42, Applicants argue that the prior art (Kubota et al) do disclose the tooth portion to bite the cable not the grip locking end portion. Since the function (to bite the cable or grip the cable) and the configuration of the transversely curved locking end portion of Kubota et al are similar to that of the current specification (Fig. 14, r.n. 159), the rejection seems to be proper.

Also, Applicants argue that the prior art (Kubota et al) fail to disclose the end portion being transversely curved across its full width.

Since the curvature of grip locking end portion is predetermined by geometry of the conductor, it would have been an obvious matter of design absent any criticality to make the grip locking end portion is transversely curved across its full width.

Additionally, the specification considers (p. 11, lines 6-9) the grip locking end portion as an optional one and does not teach why that element should be transversely curved across its full width.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 09/827,048

Art Unit: 2833

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Gilman whose telephone number is (703) 305-0847. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Alexander Gilman

(llex Cilmay